Conventional Subsea Gauge - Stainless Steel
Type 233.34 - Special
Compensated

Applications
- In compensated subsea environments: tested to working depths of 10,000 ft. of sea water
- Suitable for corrosive environments and gaseous or liquid media that will not obstruct the pressure system

Special Features
- Excellent load-cycle stability and shock resistance
- Solid front reinforced thermoplastic case
- Positive pressure ranges to 30,000 psi (2,000 bar)
- Black dial face with white enlarged numerals for subsea visualization
- Optional easy-to-assemble Lexan Shield kit for impact protection

Standard Features

Design
ASME B40.100

Sizes
4½” (115 mm) dial size

Accuracy class
± 0.5% of span (ASME B40.100 Grade 2A)
± 1.0% of span (ASME B40.100 Grade 1A)
(for 20,000 psi /1,600 bar) range and above)

Temperature error
Additional error when temperature changes from reference temperature of 68°F (20°C) ±0.4% of span for every 18°F (10°K) rising or falling.

Operating temperature
Ambient: -4°F to +150°F (-20°C to +66°C) - glycerine filled
Medium: max. +212°F (+100°C)

Ranges
Vacuum/compound to 200 psi (16 bar)
Pressure from 15 psi (1 bar) to 30,000 psi (2,000 bar)
or other equivalent units of pressure or vacuum

Working pressure
Steady: full-scale value
Fluctuating: 0.9 x full-scale value
Short time: 1.5 x full-scale value

Pressure connection
Material: 316L SS
Lower mount (LM) or lower back mount (LBM)
Optional: ½” NPT (male)
High-pressure autoclave, F250C (9/16-18 UNF RH female) or consult factory

Bourdon tube
Material: 316L SS
≤ 1,000 psi (70 bar): C-shape
> 1,000 psi (70 bar): Helical
Movement
Stainless steel. Internal stop pin at 1.1 x full scale
Overload and underload stops - standard

Dial
Black dial face with white enlarged numerals for subsea visualization

Pointer
White aluminum, adjustable

Case
Black fiberglass-reinforced thermoplastic (POCAN)
Solid front, blowout back
Turret-style case with built in rear flange lugs

Window
Dual pane safety glass (increases stability/integrity and minimizes deflection from external seawater pressure)

Case filling
- Glycerin / water mixture 86.5 / 13.5%
- FDA compliant
- Degassed to remove any impurities (N2, Oxygen, entrained gases) in order to minimize/eliminate compressibility of fill fluid
- 99% case fill, (air bubble no larger than ¼" on window when gauge is laid flat)

Dimensions

Optional extras
- Lexan Shield kit for impact protection
- Special process connections
- Custom dial layout
- Anti-glare window
- Restrictor (for NPT connections only)
- Monel wetted parts (263.34 special)
- Magnifying Lexan Shield kit

With Lexan Shield Installed

Size

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>J</th>
<th>K</th>
<th>L</th>
<th>M</th>
<th>N</th>
<th>R</th>
<th>S</th>
<th>T</th>
<th>W</th>
<th>Weight¹</th>
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</thead>
<tbody>
<tr>
<td>4.5&quot;</td>
<td>mm</td>
<td>128</td>
<td>103</td>
<td>84</td>
<td>120.3</td>
<td>86.5</td>
<td>150</td>
<td>100</td>
<td>6.3</td>
<td>40</td>
<td>28.5</td>
<td>148</td>
<td>136.5</td>
<td>25</td>
<td>12.5</td>
<td>22</td>
</tr>
<tr>
<td>in</td>
<td>5</td>
<td>4.06</td>
<td>3.31</td>
<td>4.74</td>
<td>3.41</td>
<td>5.91</td>
<td>3.94</td>
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<td>1.57</td>
<td>1.12</td>
<td>5.83</td>
<td>0.99</td>
<td>0.49</td>
<td>0.5</td>
<td>0.87</td>
<td>3 lb. filled</td>
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</table>

¹ Weight without optional accessories

Ordering information
Pressure gauge model / Nominal size / Scale range / Size of connection / Optional extras required
Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing. Modifications may take place and materials specified may be replaced by others without prior notice.

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